AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A ~~An~~ light-receiving circuit for receiving an optical signal with a predetermined transmission speed, comprising:

a light-receiving device;

a bias supply for providing a bias voltage to said light-receiving device, said bias supply including a high voltage source and a transistor connected in serial to said high voltage source;

a reference resistor for receiving ~~detecting~~ a signal current generated by said light-receiving device; and

a feedback control circuit for receiving said signal current detected by said reference resistor and feedback controlling said bias supply such that said signal current is maintained to be a predetermined magnitude,

wherein the feedback control circuit controlling in feedback said transistor in said bias supply.

2. (Cancelled).

3. (Currently Amended) The light-receiving circuit according to claim 1, further ~~comprises~~ comprising a current mirror circuit having one input port connected to ~~an output of said bias supply~~ said transistor of said bias supply and two output ports, one of two output ports being connected to said light-receiving device and the other of two output ports being connected to said reference resistor.

4. (Original) The light-receiving circuit according to claim 1, wherein said feedback control circuit has a time constant greater than said predetermined transmission speed.

5. (Cancelled).

6. (Original) The light-receiving circuit according to claim 1, wherein said light-receiving device is a PIN photodiode having an anode electrode and a cathode electrode connected to said bias supply.

7. (Cancelled).

8. (Currently Amended). A ~~An~~ light-receiving circuit for receiving an optical signal having a predetermined transmission speed, said light-receiving circuit comprising:

a high voltage source;

a ~~voltage control circuit~~ transistor with a collector, an emitter and a base, said collector being connected to said high voltage source, ~~and~~ said emitter outputting a ~~controlled~~ bias voltage;

a current mirror circuit ~~connected to said voltage control circuit, said current mirror circuit receiving and outputting said controlled bias voltage~~ having one input port connected to said emitter of said transistor for receiving said bias voltage and two output ports, one of two output ports being connected to said light-receiving for outputting said bias voltage;

a photodiode ~~connected to said current mirror circuit~~ for receiving said optical signal and ~~generates~~ generating a signal current corresponding to said optical signal by ~~providing~~ receiving said ~~controlled~~ bias voltage through said current mirror circuit;

a reference resistor ~~for detecting said signal current~~ connected to the other of two output ports of said current mirror circuit, said reference resistor receiving a current corresponding to said signal current; and

a feedback control circuit connected between said reference resistor and said base of said transistor ~~voltage control circuit~~, said feedback control circuit ~~feedback~~ controlling in feedback said ~~voltage control circuit~~ transistor such that said ~~signal~~ current corresponding to said signal current and detected through said reference resistor is maintained to be a predetermined magnitude,

wherein said photodiode is an avalanche photodiode.

9. (New) The light-receiving circuit according to claim 8,

further includes a resistor connected between said high voltage source and said collector of said transistor.

10. (New) The light-receiving circuit according to claim 8,

wherein said photodiode includes a cathode connected to said current mirror circuit and an anode connected to an inverting amplifier with a feedback impedance.